



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/601,152 09/05/00 WEISBECK

M MO-5845/LEA3

000157
BAYER CORPORATION
PATENT DEPARTMENT
100 BAYER ROAD
PITTSBURGH PA 15205

IM52/1107

EXAMINER

JOHNSON, E
ART UNIT

PAPER NUMBER

1754
DATE MAILED:

11/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/601,152

Applicant(s)

WEISBECK ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to because of the following informalities: in lines 2-3, "gold particles that has been used" appears incorrect. Examiner suggests --gold particles that have been used--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6, line 3, "the oxidation of unsaturated hydrocarbons in the gas phase" lacks antecedent basis.

Claim 7, the phrase, "was produced" makes it unclear as to whether the steps following the phrase are actually part of the claimed regeneration process.

Claims 7-9 and 11 appear to recite use limitations of a catalyst product rather than positively recited process steps

Art Unit: 1754

for regenerating a catalyst and it is unclear how the claims limit a process for catalyst regeneration.

Claim 7, "deposition-precipitation" is unclear as to whether these limitations are listed in the alternative.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6-7 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. WO 9602323A1 (translated in US Pat. No. 5,859,265).

Regarding claim 6, Muller '265 discloses a method for regeneration of a catalyst based on titanium silicalite (see abstract) with a gold modifier (see column 4, lines 33-36 and claim 3) comprising contacting the catalyst with a solution of hydrogen peroxide in mineral acid (see column 5, lines 16-18).

Regarding claim 7, Muller '265 discloses chemical vapor deposition (see column 3, lines 65-66) and making a white suspension reaction mixture from solution (see column 5, lines 29-42).

Art Unit: 1754

Regarding claim 9, the claimed range of hydrogen peroxide includes zero and Muller '265 discloses catalyst in contact with 0.196% hydrogen peroxide (see Example 3).

Regarding claim 10, Muller '265 discloses a method for regeneration of a catalyst based on titanium silicalite (see abstract) with a gold modifier (see column 4, lines 33-36 and claim 3).

Regarding claim 11, Muller '265 discloses gas phase olefin epoxidation in the presence of hydrogen (see column 4, lines 6-61).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller as applied to claim 6 above, and further in view of Bowman et al. 6,031,116.

Muller fails to disclose contacting the catalyst being regenerated with steam under pressure.

Art Unit: 1754

Bowman '116 discloses adding water into the gas (see column 12, lines 50-67 and column 13, lines 1-6).

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the water of Bowman with the regeneration of Muller because Bowman discloses his water to be beneficially added to the regeneration gas stream, for oxidation catalyst regeneration (title and abstract) and Muller discloses high temperature regeneration in inert gas or solution (see column 5, lines 9-18).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Latos 4,118,339 discloses the use of noble metal solutions in catalyst regeneration zones comprising a saturated aliphatic alcohol; Kuperman et al. 6,255,499 (filed Apr. 1999) discloses a process for the direct oxidation of olefins to olefin oxides comprising gold on titanosilicate catalyst regeneration (see abstract) comprising heating in the presence of oxygen and hydrogen and adding water to the regeneration gas (see paragraph bridging columns 17-18).


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M.

Art Unit: 1754

Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

EMJ

November 2, 2001